AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions of claims in the application.

1. (Currently amended): An image pickup device, comprising

a spectroscope which makes an optical image of an object to be picked up as condensed by a condensing lens system incident and which separates the same into two directions,

an overall image pickup portion which forms one optical image as separated by the spectroscope as an overall image of the object to be picked up on an image-forming surface disposed with a primary area pickup element as reduced in size through a primary image-forming lens system and which picks the overall image up by the primary area pickup element so as to output an overall image signal, and

a detailed image pickup portion which forms the other optical image as separated by the spectroscope as an image on an image-forming surface disposed with a secondary area pickup element having a resolution equivalent to the primary area pickup element as enlarged in size through a secondary image-forming lens system and which picks a part of the overall image up by the secondary area pickup element so as to output a detailed image signal of high resolution.

2. (Original): The device according to claim 1, wherein the primary image-forming lens system reduces the optical image from the spectroscope at a specified reduction scale α so as to form an image of the overall image of the object on the primary area pickup element,

wherein the secondary image-forming lens system enlarges light from the spectroscope at a specified enlargement scale β so as to form an image of the overall image of the object on a position of the image-forming surface on which the secondary area pickup element is disposed, and

wherein a resolution ratio for the detailed image that is to be of higher resolution with respect to the overall image is set on the basis of the reduction scale α, the enlargement scale β, and pickup sizes of the primary and secondary area pickup elements.

3. (Original): The device according to claim 2, wherein the resolution ratio K of the detailed image that is to be of higher resolution with respect to the overall image is set to satisfy

$$K=(\beta/\alpha) \cdot \gamma$$

wherein γ is a size ratio (L1/L2) of a pickup size L1 of the primary area pickup element to a pickup size L2 of the secondary area pickup element L2.

4. (Original): The device according to claim 3, wherein the resolution ratio K of the detailed image that is to be of higher resolution with respect to the overall image is set to satisfy

$$K=(\beta/\alpha)$$

in case the pickup sizes of the primary and secondary area pickup elements are identical.

5. (Original): The device according to claim 1, wherein the detailed image pickup unit is comprised with a moving unit which moves the secondary area pickup element to an arbitrary position of the overall image formed on the image-forming surface.

6. (Original): The device according to claim 5, wherein the moving unit is comprised with a position controlling unit which moves the secondary area pickup element to a target position within the overall image as instructed from an external unit.

7. (Original): The device according to claim 5, wherein the detailed image pickup unit is comprised with a position controlling unit in which a plurality of secondary area pickup elements are fixedly provided on the moving unit such that it selects and moves a secondary area pickup element that is closest to the target position within the overall image as instructed from an external unit.

8. (Original): The device according to claim 5, wherein the detailed image pickup unit is comprised with a position controlling unit which detects a specific moving body from the overall image signals that are output from the overall image pickup unit and which makes the secondary area pickup element track and move through the moving unit.

9. (Original): The device according to claim 1, wherein a plurality of groups of spectroscopes and detailed image pickup units are disposed in a multi-staged manner along an optical axis of the condensing lens system so as to make one optical image from a spectroscope of the last stage incident into the overall image pickup unit,

wherein different resolution ratios with respect to the overall image are set such that the resolutions of the detailed image signals as output from the plurality of detailed image pickup units differ, and

wherein a resolution selecting unit is provided which selects and outputs a detailed image signal having a corresponding resolution from among the plurality of detailed image pickup units through instructions for selecting a resolution from an external unit.

10. (Original): The device according to claim 9, wherein the plurality of spectroscopes perform separation of incident light such that amounts of light that are made incident into the plurality of detailed image pickup units and the overall image pickup unit are identical.

11. (Original): The device according to claim 1, further including an image compositing portion which compresses an overall image signal of a specified image size and which compresses a detailed image signal of identical specified image size such that it suits the image size that has become empty through the compression of the overall image signal, and which

generates a composite image signal of the specified size upon combining the compressed overall image signal and the detailed image signal so as to output the same to the external unit.